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# NORTHEAST CAMBODIA CHILD SURVIVAL PROJECT

Chhlong Operational District, Kratie Province

Grant # FAO-A-00-00-00040-00

October, 2000 – March, 2004



FY2003 ANNUAL REPORT TO USAID

**Written and Reviewed by:**  
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## **ACRONYMS**

ADRA	Adventist Development and Relief Agency
ANC	Antenatal Care
ARI	Acute Respiratory Infection
CIDA	Canadian International Development Agency
COPE	Client-Oriented, Provider-Efficient
CS	Child Survival
CSPO	Child Survival Program Officer
EPI	Expanded Program of Immunization
FBC	Feedback Committee
GMP	Growth Monitoring Program
HC	Health Center
HIV/AIDS	Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome
HKI	Helen Keller International
HSS	Health Systems Strengthening
IMCI	Integrated Management of Childhood Illnesses
LQAS	Lot Quality Assurance Sampling
LSS	Life Saving Skills
MOH	Ministry of Health
MPA	Minimum Package of Activities
MTE	Mid-Term Evaluation
NCCSP	Northeast Cambodia Child Survival Program
NERP	Nutritional Education Rehabilitation Program
NGO	Non-governmental Organization
OD	Operational District
ORS	Oral Rehydration Solution
PFD	Partners for Development
PRA	Participatory Rural Appraisal
RACHA	Reproductive and Child Health Alliance
RHAC	Reproductive Health Alliance in Cambodia
TBA	Traditional Birth Attendant
TOT	Training of Trainers
TT	Tetanus Toxoid
UNFPA	United Nations Family Planning Association
URC	University Research Co., LLC
USAID	United States Agency for International Development
VHV	Village Health Volunteer
VSO	Voluntary Service Overseas



***Annual Report to USAID for FY 2003***  
***Northeast Cambodia Child Survival Program***  
***Chhlong Operational District, Kratie Province***  
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## **I. Background to Project**

PFD was awarded a 42-month USAID Child Survival Program Grant from October 2000 to March 2004. The goal of the Northeast Cambodia Child Survival Program (NCCSP) is to improve the health of children under five in Chhlong Operational District (OD) of Kratie Province through control of diarrheal disease, immunization, improved nutrition and promotion of breastfeeding.

The program's primary strategy is to increase caretakers' case management abilities and promote improved health behaviors through community health education conducted by a network of Village Health Volunteers (VHVs). VHVs are selected by communities in a participatory manner and are responsible for approximately 50 households each. In addition to this primary task of educating mothers on improved care taking and preventive behaviors, the program promotes linkages between the community and the government health system to increase the capacities of both public and private providers. Linkage with the health system, and a potentially sustainable system for supervision of VHV activities, is addressed through the use of Health Center (HC) staff to both train and supervise VHVs. The program facilitates the training of HC staff and private drug sellers in diarrheal disease management, and provides training and support for nutrition and HC immunization activities. In a complementary program, PFD has trained HC staff in areas of Integrated Management of Childhood Illnesses (IMCI), Client-Oriented, Provider-Efficient (COPE) clinic management, and Life-Saving Skills (LSS) and Pre-LSS (antenatal care) for midwives.

In addition to promoting improved breastfeeding and weaning practices through VHV health education, the program is conducting two different approaches to improved nutrition: i) formal and informal community-based health education in all HC catchment areas, and; ii) health education plus implementation of the "Hearth" model, a pilot nutrition intervention in 4 HC catchment areas. In the Hearth model, a positive deviance study is conducted at village level followed by a Nutrition Education and Rehabilitation Project (NERP). The community is assisted in preparation and feeding of nutritious supplemental meals to malnourished children using locally available, affordable food sources. NERPs are followed up with growth monitoring of children and intensive education

of mothers. These activities are being conducted in the 12 villages with the greatest need. Hearth villages participate in this intensive nutrition program for at least one year.

Complementing the NCCSP is a UNFPA/MOH-funded Reproductive Health Program in which village-based agents sell contraceptive pills and condoms and provide education on birth-spacing and HIV prevention in 89 of the 101 villages of the OD. Those within easy walking distance of a Health Center are excluded. In some cases, these agents are also VHVs.

The Northeast Cambodia Child Survival Program (NCCSP) is primarily funded by USAID, with matching funds from a variety of donors including UNFPA, the Canadian International Development Agency (CIDA), and the Japanese Embassy. The NCCSP is staffed by one Program Coordinator (international), one Team Manager, eight Program Officers, two Junior Officers, and two administrative staff. A complementary program, Health System Strengthening (HSS), funded by the USAID Cambodia mission, links PFD staff directly with Health Centers and midwives.

As surveys have shown, most Cambodians have a low level of confidence in the formal health delivery system, preferring to use locally available and traditional services instead. PFD has worked closely with local drug sellers, traditional birth attendants, community leaders, and mothers in order to increase both their knowledge of health care, as well as their faith and interest in the provincial and local health infrastructure. Concurrently, PFD has invested in quality improvement of services provided at the health system level. PFD facilitates clinical skills training, supports outreach activities, promotes organizational reform and provides training to increase staff skills in management, monitoring and evaluation. PFD has supported the election and training of Health Center Feedback Committees (FBCs), now referred to as Village Health Support Groups (VHSG), in Chhlong OD. These committees are a vital part of the process of local capacity building and of creating linkages between public services and the community. Active participation at the national level includes participation in government working groups and public and private forums that seek to improve IMCI, malaria control and reproductive health through policy reform and capacity building efforts.

Year one of this grant was dedicated primarily to setting up the program. Activities during that year included VHV selection, Child Survival Participatory Rural Appraisal (PRA), PFD local staff capacity building; partnering with local health authorities, and developing a baseline from which to measure results. Many educational tools such as flipcharts for immunizations, diarrhea, nutrition and breastfeeding were developed.

The second year of the grant evidenced continued trainings and expansion of educational activities in the villages. VHVs conducted community education sessions in their respective villages and PFD staff supervised the VHV supervisors from the Health Centers. In 2002, PFD conducted a mid-term evaluation whereby an independent consultant reviewed PFD activities and outcomes through a variety of sources and methods. The overall conclusion was very positive, with recommendations to improve and to expand the program.

## **II. Description of 2003 Activities:**

The new intervention of the NCCSP in 2003 was implementation of the Hearth Nutrition Model. An assessment of malnourished children was conducted in Chhlong OD and NCCSP staff were trained in implementation of Hearth. Ongoing activities in all other intervention areas (supervision,

training, community education) have continued along with trainings in new educational techniques such as drama/theatre.

### **Summary Accomplishments**

#### **Health Education Activities:**

1. VHVs held 4,142 community health education sessions from September 2002 – August 2003. These were based on formal trainings in the areas of breastfeeding, immunization, nutrition and diarrhea control. VHVs were supplied with training, lesson plans and audiovisual materials for each health education intervention.
2. VHVs conducted 37,179 home visits and individual counseling sessions on the above topics.
3. VHVs have conducted 619 complementary food trainings and set up 1,366 hand-washing stations.
4. VHVs have directly facilitated the referral of 224 children and 160 mothers to the Health Centers.

#### **Supervision:**

1. Child Survival Program Officers (CSPOs) conducted 483 supervisory visits with VHVs and 89 supervisory visits with VHV Supervisors from October 2002 – September 30, 2003. They also helped facilitate 70 team meetings. (Supervision is conducted bimonthly at the HCs.)
2. PFD staff supervised, mentored and provided a range of trainings to 22 Health Center staff who are directly responsible for supervision of community VHVs.
3. CSPOs supervised 103 drug sellers this year.

#### **Trainings conducted by PFD:**

PFD staff conducted the following trainings this year:

- VAC (Vitamin A Capsules) for VHVs (October 2002)
- TBA Supervisors Training (November 2002)
- TBA Colostrum Training (December 2002)
- VHV Supervisor Refresher Training (April 2003)
- VHV Refresher Training (May 2003)
- Training of PFD new staff in Hearth (September 2003)
- Drama workshop for BCC (September 2003)
- Positive Deviance Presentation for other Cambodia Health Agencies – MEDICAM (September 2003)

#### **Hearth (for results see below under nutrition goals):**

1. CSPOs conducted 12 new HEARTH projects in 12 villages this year.
2. PFD staff and VHVs Conducted 42 Growth Monitoring Programs (GMP) in 11 villages. One GMP consists of collecting all children under three in the target hearth village, weighing

them on a swing scale, plotting their progress on the GMP chart and informing the mother of the child's progress.

3. PFD staff and VHVs conducted 34 Nutrition Education Rehabilitation Programs (NERP) in 11 villages. NERPs last for 10 days and include health education and participatory preparation of highly nutrient foods. Malnourished children receive a rehabilitation meal daily during the NERP. The community provides many food items, while PFD supplements the protein sources. Mothers are taught what kinds of foods to feed children, how to cook them and how often to feed them. Children are weighed at the end of each NERP to monitor progress.

#### Staff Development:

PFD staff attended the following seminars and/or workshops this year:

- Conducting Focus Groups led by PFD staff (October 2002)
- Hearth TOT led by PFD staff (October 2002)
- Strategic Planning for Behavior Change led by CORE (February 2003)
- Sexuality and Reproductive Health led by RHAC (March 2003)
- TBA Training led by RACHA (March 2003)
- BCC Workshop led by ADRA (April 2003)
- BCC Training led by MOH (August 2003)
- Drama Workshop for BCC led by PFD staff (September, 2003)

#### Health Center Capacity Development:

Child Survival goals were enhanced in Chhlong by the capacity development activities of the Health Systems Strengthening project. Activities organized or facilitated by PFD staff included:

- IMCI Clinical Management Round I, 9-20 December 2002.
- IMCI TOT Facilitator, 27-31 January, 2003
- IMCI Clinical Management Round 2, 2-13 June, 2003
- Client-Oriented, Provider-Efficient (COPE) Facilitation, 30 June – 4 July 2003.
- Life-Saving Skills (LSS) Round I, 19 May – 6 June, 2003
- LSS Round II, 6-24 July 2003.
- Pre-Life Saving Skills (Pre-LSS), 20-21 June 2003.
- Pre-LSS TOT, 19-20 June 2003.

#### Accomplishments Versus Objectives

<b>Immunization</b>		
<b>Goal:</b> Reduce morbidity and mortality from vaccine preventable diseases among children less than five years old in the program area		
<b>Objectives / Results</b>	<b>Progress on Target</b>	<b>Comments</b>
Increase the proportion of children who are fully immunized before the age of one	Yes	Children with immunization card: <i>Baseline: 32%</i> <i>Midterm Target: N/A</i> <i>Midterm Evaluation: 87%</i> Children fully immunized (among children with card): <i>Baseline: 44%</i>

<p>Increase the proportion of women of reproductive age whose pregnancies are protected by TT coverage</p>	<p>Yes</p>	<p><i>Midterm Target: N/A</i>  <i>Midterm Evaluation: 73%</i>  Children fully immunized (out of total children in the program area.):  <i>Baseline: 14%</i>  <i>Midterm Target: 30%</i>  <i>Midterm Evaluation: 63%</i>  Mothers who know the age at which child should receive measles vaccine:  <i>Baseline: 10%</i>  <i>Midterm Target: N/A</i>  <i>Midterm Evaluation: 39%</i></p> <p>Mothers who know the purpose of TT vaccine:  <i>Baseline: 25%</i>  <i>Midterm Target: N/A</i>  <i>Midterm Evaluation: 52%</i>  Mothers who have a maternal health card:  <i>Baseline: 21%</i>  <i>Midterm Target: N/A</i>  <i>Midterm Evaluation: 76%</i>  Mothers who received adequate TT protection during pregnancy:  <i>Baseline: N/A</i>  <i>Midterm Target: 70%</i>  <i>Midterm Evaluation: 65%</i></p>
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- VHV and their supervisors completed trainings in EPI (including TOT and material development) by the end of 2001. VHV - led health education sessions on EPI were formally completed by March 2003. These sessions continue on a demand/as needed basis, especially for mothers of newborn.
- Through a partnership with the Japanese Grant Assistance for Grassroots Projects (GPP) Program, PFD purchased 5 propane-powered refrigerators to be placed in the HCs farthest from the OD. The refrigerators will be distributed following a two-day cold chain training in collaboration with the Ministry of Health.
- As part of the complementary Health System Strengthening Project, PFD hired a staff member who works at the Health Center level providing support and technical assistance in EPI. This staff member attends national EPI trainings and provides technical support to the OD and HCs on a bi-monthly basis.

<b>Control of Diarrheal Disease</b>		
<b>Goal:</b> Reduce morbidity and mortality from diarrhea disease among children less than five years old in the program area		
<b>Objectives / Results</b>	<b>Progress on Target</b>	<b>Comments</b>
Increase the proportion of diarrhea episodes among children < 5 years of age that are appropriately managed at the household level	Yes	<p>Children are breastfed continuously during a diarrheal episode:  <i>Baseline: 21%</i>  <i>Midterm Target: N/A</i>  <i>Midterm Evaluation: 51%</i></p> <p>Children are provided more fluids than usual during diarrheal episode:  <i>Baseline: 34%</i>  <i>Midterm Target: 45%</i>  <i>Midterm Evaluation: 78%</i></p> <p>Children are provided more or same amount of food during diarrhea:  <i>Baseline: 11%</i>  <i>Midterm Target: 25%</i>  <i>Midterm Evaluation: 76%</i></p> <p>ORT used during diarrhea:  <i>Baseline: 15%</i>  <i>Midterm Target: 30%</i>  <i>Midterm Evaluation: 41%</i></p> <p>Mothers can describe correct management of diarrhea:  <i>Baseline: 42%</i>  <i>Midterm Target: N/A</i>  <i>Midterm Evaluation: 80%</i></p> <p>Mothers who have heard of ORS:  <i>Baseline: 3%</i>  <i>Midterm Target: N/A</i>  <i>Midterm Evaluation: 94%</i></p> <p>Mothers who know danger signs in diarrhea:  <i>Baseline: 10%</i>  <i>Midterm Target: 20-30%</i>  <i>Midterm Evaluation: 81%</i></p> <p>Mothers know to feed child more when recovering from diarrhea:  <i>Baseline: 17%</i>  <i>Midterm Target: N/A</i>  <i>Midterm Evaluation: 72%</i></p>



Increase the proportion of caretakers practicing hygiene behaviors that prevent diarrhea	Yes	<p>Mothers report sanitary disposal of child's feces:  <i>Baseline: N/A</i>  <i>Midterm Target: 70%</i>  <i>Midterm Evaluation: 70%</i></p> <p>Mothers report hand-washing before eating or cooking and after defecation:  <i>Baseline: N/A</i>  <i>Midterm Target: 100%</i>  <i>Midterm Evaluation: 95%</i></p> <p>Use soap in hand-washing:  <i>Baseline: N/A</i>  <i>Midterm Target: 90%</i>  <i>Midterm Evaluation: 90%</i></p> <p>Have a place in household set aside for hand-washing:  <i>Baseline: N/A</i>  <i>Midterm Target: 60%</i>  <i>Midterm Evaluation: 55%</i></p> <p>Have presence in the home of water soap/ash, and clean cloth:  <i>Baseline: N/A</i>  <i>Midterm Target: 50%</i>  <i>Midterm Evaluation: 65%</i></p>
Increase access to ORS packets in the villages through the private sector	Yes	<p>PFD trained 156 drug sellers in the OD on the use of ORS. The MTE found ORS available in 11 out of 11 villages visited.</p>

- VHV's and their supervisors completed trainings in diarrhea prevention and treatment (including TOT and material development) by the end of 2001. VHV - led health education sessions continue on a demand/as needed basis.
- PFD CSPOs continue to supervise drug sellers in the sale and education of ORS. From October 2002 – September 2003, PFD staff supervised 103 drug sellers.

<b>Nutrition</b>		
<b>Goal:</b> Improve the nutritional status among children less than five years old in the program area		
<b>Objectives / Results</b>	<b>Progress on Target</b>	<b>Comments</b>
Reduce the proportion of children < 3 years of age who are severely or moderately malnourished.	Yes	PFD has established Hearth in 12 villages. Each Hearth is followed by alternating months of GMP and NERP.
Reduce the proportion of micronutrient deficiencies in children 6 – 59 months	Yes	PFD collaborates with HKI in VAC distribution every six months. All VHVs were trained in micronutrient malnutrition and VHVs continue to provide this education to communities.
Increase the proportion of mothers exclusively breastfeeding children 0 –5 months old.	Yes	TBAs who are the first point of contact for mothers are trained in the importance of exclusive breastfeeding from 0-5 months
Increase the proportion of mothers who initiate breastfeeding immediately (within one hour) after delivery	Yes	TBAs were trained in appropriate breastfeeding techniques, colostrum feeding and exclusive breastfeeding (0-5months). TBAs provide education to new mothers.
Increase the proportion of mothers who provide appropriate complementary foods to children 6 - 23 months	Yes	VHVs were trained in complementary foods and in turn educate mothers. Complementary feeding is the core of the Hearth model and central to the education conducted during NERPs.
Increase the capacity of TBAs related to breastfeeding promotion	Yes	183 TBAs have been trained on all aspects of breastfeeding promotion and exclusive breastfeeding.

- VHVs and their supervisors completed trainings in nutrition and micronutrients/Vitamin A (including TOT and material development). VHV - led health education sessions on nutrition continue on a demand/as needed basis.

- PFD trained 183 TBAs in December 2002 on colostrum promotion. The training concluded with the TBAs signing/thumb printing a contract that they would encourage mothers to initiate breastfeeding within the first hour of delivery.
- PFD mobilizes its VHVs to participate in the HKI Vitamin A campaign every 6 months.
- PFD conducted a LQAS survey on nutrition and breastfeeding in May 2003. Using Lot Quality sampling, PFD and OD staff surveyed 275 women in 11 Health Center catchment areas. Main indicator results are listed in the table below:

<b>Indicator</b>	<b>Baseline 1999</b>	<b>Midterm target</b>	<b>LQAS 2003</b>
<b>Breastfeeding Practices</b>			
Breastfed the child during the first hour after delivery	1.7%	20%	40%
Mother is exclusive breastfeeding her child 0-5 months	12.3%	20%	45%
Child 6 – 9 months received breast milk and semi-solid foods in the past 24 hours	N/A	N/A	90%
Child 6 – 9 months received semi-solid foods with some sort of nutrient enriched food added to it in the past 24 hours	N/A	N/A	85%
Child 6 – 23 months ate semi-solid foods with some sort of nutrient enriched food added to it in the past 24 hours	N/A	N/A	95%
Child 6 – 23 months ate some sort of protein-enriched food in the past 24 hours	N/A	N/A	90%
The child 6 – 23 months ate some sort of vitamin A enriched food in the past 24 hours	N/A	N/A	90%
Child 6 – 23 months who received vitamin A enriched food that was cooked in oil in the past 24 hours	51.7%	N/A	70%
The child ate semi – solid food yesterday more than three times during the day and night	N/A	N/A	50%
<b>Complementary Food Knowledge</b>			
Knowledge of when to start adding foods to breastfeeding	34%	N/A	65%
Knowledge of what additional foods to breastfeeding should be	81.3%	N/A	97%
<b>Iodine Salt Use</b>			
Mother uses iodine salt	N/A	N/A	25%
<b>Vitamin A Knowledge</b>			
Knowledge of which vitamin helps prevent night blindness	18.7%	N/A	75%
Knowledge of at least one kind of food that contains Vitamin A to prevent night blindness	8.7%	N/A	75%

Knowledge of number of times per year the child receives Vitamin A capsule	50% (first round of LQAS)	N/A	45%
<b>Vitamin A Coverage</b>			
The child received Vitamin A capsule last month (VAC campaign was conducted 1 month before survey)	N/A	N/A	85%

#### *The Hearth Model for Nutrition*

PFD received training and began implementing the Hearth Nutrition Model in April 2002. PFD is implementing this model as a pilot for Cambodia, after project successes in countries such as Vietnam, Haiti and Bangladesh. Many other NGOs in Cambodia have looked to PFD for learning and guidance on implementation of this model.

The Hearth Model for nutrition has been a significant focus of PFD's work this year. PFD has established 12 Hearth villages so far, with a target of 15 by the end of the grant. Hearth follows a system whereby villages are selected based on the percentage of malnourished children (as determined by weight-per-age). Villages then undergo a participatory assessment and positive deviant study followed by multiple cycles of NERP/GMP alternating every other month. GMP is a simple activity of gathering and weighing children in each village (facilitated primarily by VHVs). NERPs bring together malnourished children and their mothers, and provide intensive health education on nutrition and a variety of other health topics. Participating mothers contribute low cost complimentary foods and cook and serve a nutrient-rich meal to their children daily during the NERP. Each NERP lasts ten days and malnourished children receive an additional meal each day. On the last day of the NERP, children are weighed once more.

PFD has found that results from the Hearth Model vary greatly and are dependent on many factors. For example, in the village of Prohout there has been a significant decrease in the number of malnourished children (34%) after only three rounds of GMP and NERP, while in a few villages the numbers of malnourished children has either stayed the same, or in some instances, increased as is shown in the table below. (A discussion of lessons learned follows the table.)

Village	Round of NERP	Baseline % Under-weight	After NERPS				
			Monitoring	% Under Weight	# Graduate from Severe to Moderate	# Graduate from Moderate to normal	Change in Percent of Under-weight
Kampong Sre	Round 5 Month10	50%	46 weighed 13 underweight	28%	2	8	-22%
Prey Ko	Round 6 Month12	50%	60 weighed 15 underweight	25%	4	7	-25%
Meanchey	Round 5 Month10	44%	41 weighed 11 underweight	26%	3	10	- 18%
Boss	Round 4 Month 8	51%	42 weighed 15 underweight	35%	2	12	-16%
Sre Triek	Round 4 Month 8	31%	30 weighed 10 underweight	33%	2	7	+2%
Prohout	Round 3 Month 6	52%	37 weighed 7 underweight	18%	3	15	-34%
Tropeang Sre	Round 3 Month 6	29%	16 weighed 3 underweight	18%	1	2	- 11%
Boeung Kiep	Round 3 Month 6	48%	37 weighed 13 underweight	35%	1	8	-13%
Krong	Round 1 Month 2	41%	63 weighed 21 underweight	33%	0	1	-8%
Prolay Triek	Round 1 Month 2	40%	42 weighed 15 underweight	35%	0	2	-5%
Tropearng Lark	Round 1 Month 2	56%	45 weighed 23 underweight	51%	2	2	-5%
<b>Totals</b>		<b>45%</b>	<b>459 weighed 146 underweight</b>	<b>32%</b>	<b>20</b>	<b>74</b>	<b>-13%</b>

PFD has learned the following lessons and is taking the steps to review and revise the Hearth Model in order to maximize results:

- Hearth is an intensive, long-term intervention that requires from nine months to one year to see full results.
- PFD is investigating the communities with poor results to find the causes of continued malnutrition. So far PFD has found that easy access to sources of protein seems to make a critical difference. Riverside communities fare much better, a fact that can be attributed to access to fish and other protein sources. On the other hand, in the village of Sre Triek, located inland, there are few vegetable gardens and farm animals to provide supplementary foods. Other apparent causes of poor performance include: epidemics of other illnesses (Sre Triek is also a malaria endemic area), low birth weights (indicating a need for maternal

health education) and the heavy workloads of mothers, especially during the rainy season, that prevent them from providing high nutrient home feedings.

- It is important to follow-up children who are not showing improvement. This was not established in the original Hearth design. Although VHVs and PFD staff tend to increase counseling with mothers of very sick children, there is no criteria or guidelines for health workers to provide intensive follow-up (including home visits and food security analyses) for difficult cases.
- There is a need to develop easy-to-understand educational materials for mothers to take home to review to ensure that they are able to continue with high-nutrient feedings at home, between rounds of NERP.
- There is a need to revise selection criteria for Hearth. Currently the only criteria used in selection of villages for Hearth is the percentage of malnourished children. This is based on the assumption that the primary cause of malnourishment is lack of knowledge about healthy foods. Although this is often the case, other factors must be considered. Issues of food availability, for example, need to be evaluated and addressed in order to ensure impact. It is important to be able to identify the villages where Hearth alone will achieve the desired results. It is equally important to be able to identify the villages where more complex interventions are needed. (See below.)
- Development of complementary activities such as intensive malaria prevention and animal husbandry/garden projects for villages with extenuating nutrition problems will help improve results.

Hearth is a very labor-intensive intervention and quantitative results are inconsistent. Based on the qualitative data achieved (see section **VII Success Stories**) and the high results in the longest-running villages, PFD is committed to achieving planned targets by improving the implementation through these lessons learned.

<b>Capacity Building of Public Sector</b>		
<b>Goal:</b> Increase the capacity of public health care providers in the health centers and Operational District to manage childhood illnesses and malnutrition		
<b>Objectives / Results</b>	<b>Progress on Target</b>	<b>Comments</b>
Increase the proportion of diarrhea cases among children < 5 years of age that are appropriately managed by health center staff	Yes	PFD staff provide continuous on-the-job training and technical assistance to HC staff on a rotational basis for all intervention areas (diarrhea, EPI, nutrition and breastfeeding).
Increase the capacity of health center staff to provide quality immunization services	Yes	One PFD staff, specialized in EPI, monitors and provides intensive technical assistance and support to all HCs on issues of EPI.

Increase capacity of HC staff related to nutrition and breastfeeding promotion	Yes	VHV supervisors from all the HCs received refresher trainings in April 2003.
Increase the capacity of Health Center staff who serve as VHV Supervisors to train and supervise VHVs	Yes	PFD, in collaboration with MOH, provided clinical IMCI training to 10 HCs in Chhlong OD in October 2002 and March 2003. PFD staff continue to supervise and provide technical assistance on IMCI issues. Round 3 will be conducted in December 2003.
Increase the capacity of OD staff to plan, supervise, and manage child survival activities	Yes	PFD, in collaboration with RACHA, provided Client Oriented Provider Efficient (COPE) trainings to 13 PHD and OD staff members (who in turn implement in HCs). PFD Medical Officers continue to provide technical assistance to staff on COPE issues and assist in facilitating COPE bi-monthly meetings.

- When the Child Survival program was being designed it was evident that there was the need to develop the capacity of the existing health system as demand for health services was created at the community level. In addition to the ongoing Child Survival project, PFD designed and secured funding for a complementary project through the USAID Cambodia mission which engages in health system strengthening. This project is known as the *Spien Sokhapheap* (Bridges for Health) Program and operates in four ODs (two provinces), including Chhlong OD. Health System Strengthening (HSS) activities, which complement the Child Survival Project, are provided in Chhlong while additional focus areas – malaria, reproductive health and HIV/AIDS prevention – are also included.
- The PFD Spein Sokhapheap HSS project provides training to HC and OD staff in IMCI, EPI, COPE, and Life Saving Skills and ANC for midwives.

### III. Constraints and Limitations

The PFD Child Survival Project has been fortunate in that it has had very few serious constraints. Most obstacles concern events and situations which delay, but do not impede the ability to carry out activities. Examples of constraints are listed below:

- During long Khmer holidays PFD and HC staff are not available, and communities are not willing to attend education sessions which can be limiting. PFD has planned future activities with these events in mind to ensure that all planned activities can be accomplished in the proposed time frame.
- Overscheduling of activities and trainings by PFD, PHD and other NGOs can overburden the staff. PFD is working to ensure greater communication, collaboration and joint planning among government and NGO partners.
- Hearth activities are more time consuming than originally planned. PFD is working hard to schedule Hearth activities and complementary activities as efficiently as possible.
- Natural Disasters: For each year of the Project, PFD's activities have been suspended for a period of weeks or months while PFD staff, in partnership with government Health Center staff, respond to urgent health needs caused by flooding.
- Security: Many PFD activities were suspended for as much as six weeks in the summer of 2003 due to security concerns surrounding the national elections. During the build-up to the elections, active campaigning by political parties was conducted in the project villages. The province was considered a highly contested area and there were security incidences coupled with violence. PFD was unable to conduct any activities that might appear political (e.g. community meetings, election of VHVs). PFD field activities were completely suspended through late July and early August in order to ensure security of PFD staff, VHVs and local government partners.
- Village Health Volunteer (VHV) Capacity: The Project initially assumed a higher level of education and sophistication of VHVs than was actually the case. For example, literacy levels among VHVs are much lower than had been presumed in the initial planning. This situation requires longer periods of training, simplification of the training curriculum, increased numbers of refresher trainings and more supervision than was initially proposed. With these Project modifications, VHVs have proven to be very capable, committed and, most importantly, effective, in delivering critical child survival health education messages.

#### **IV. Technical Assistance**

The relationships among NGOs and other service providers in Cambodia are remarkably collaborative. PFD participates in Child Survival Group quarterly meetings where each participating NGO shares new intervention models and lessons learned from pilots. PFD has been fortunate to participate in trainings conducted by NGOs such as ADRA (BCC Workshop) and CARE (Birth Preparedness/Maternal Health workshop) and has invited these and other agencies and government counterparts to participate in PFD led training such as for Hearth and Drama/BCC.

PFD has had a long-standing relationship with the British Volunteer Service Overseas (VSO) program which has provided PFD with two nurse interns in the last two years. PFD also recruits summer interns from Tulane University. The most recent intern developed and implemented a



KAP survey for the reproductive health program. She also developed an assertiveness training manual for HIV/AIDS to enhance condom use negotiation skills on the part of women.

## **V. Detailed Implementation Plan (DIP) or Midterm Evaluation (MTE) Changes**

The original Child Survival program design remains relatively unchanged since the DIP was developed and submitted. A few minor changes, as noted in the MTE, have been made to the activities. For example:

- The proposal originally planned to have three groups of nutrition education interventions: 1. community education; 2. education and growth monitoring; and, 3. Hearth intervention. These evolved over time to two activities - community education and Hearth – in order to make the nutrition pilot more manageable. The exact number of Hearth villages is still to be determined. While 20 villages remains the ideal for the program, 15 seems to be more realistic in the time remaining.
- The idea of “Hand-washing corners” has been revised to be measured by the presence of soap and water and reported/observed behavior.
- Cooking demonstrations for weaning foods are included in NERP activities, but when conducting nutrition education without NERP, VHVs simply explain how to cook without actually demonstrating.
- Mothers’ support groups have been replaced by VHV education and discussion sessions.
- PFD began the Health Systems Strengthening (HSS) project to complement the Child Survival project by providing on-the-job training and technical assistance as well as formal training for health center staff (e.g. - COPE, IMCI, LSS and ANC).
- The idea of soap-making was dropped due to the availability and low price of soap in the area versus the labor-intensiveness of making soap.
- The soy-product initiative was dropped due to lack of demonstrable success in pilot testing.
- Only malnourished children who have other illnesses are referred to the HCs because HCs are not able to provide nutritional rehabilitation.

## **VI. Recommendations from the MTE**

PFD received 29 recommendations from the Mid-term Evaluation. Within reason, PFD Managers and staff have responded or are responding to each one. The following is a description of each recommendation and PFD’s response.

#### A. Overall Recommendations

1. The Program should continue and expand, resources permitting, to the other OD of Kratie Province so that the entire Province is covered.

Response: Primary Child Survival program activities have continued as planned in the Chhlong OD. In FY2003, PFD received funding from the USAID Cambodia Mission to develop the *Spien Sokapheap* (Bridges for Health) program based on lessons learned from the Chhlong Child Survival program. This program is currently being implemented in Kratie OD and Koh Kong Province.

2. The basic structure of VHV selection by communities, one VHV per 50 households and supervision of VHVs by HC staff should continue.

Response: The VHV selection process continues as was originally planned and implemented.

3. USAID should fund an extension of the Program after the scheduled end date of the grant in March 2004 in order to allow activities which are having a demonstrable impact on child health to continue, and help ensure permanent returns on its investment by supporting the Program until the health system is sufficiently developed to take it over.

Response: PFD is preparing to submit a no-cost extension proposal to carry the project through to the end of September 2004, in order to complete activities which were delayed due to circumstances beyond the control of the project (i.e., flooding, washed out roads, national election security. Section III above.) In addition to the no-cost extension, PFD is preparing a cost extension proposal in response to the FY2004 RFA to continue the program for 5 more years. Expected new interventions include: community IMCI-type educational interventions; VHV and Supervisor trainings in BCC to move a greater number of mothers beyond knowledge (demonstrated success) to actual behavior change; inclusion of significant minorities (such as Vietnamese floating villages); additional interventions (such as ARI, malaria, dengue, and skin diseases, see recommendation #6 under VHV activities); and Birth Preparedness for maternal health.

#### B. VHV Activities

1. Non-performing VHVs (approximately 10% of the total) should be identified and replaced, and training provided to the replacements.

Response: Directly following the Mid-term Evaluation, PFD replaced non-performing VHVs (43 in all) and provided training to their replacements concurrent with the refresher training for existing VHVs.

2. Special remedial refresher training should be provided to the minority of VHVs who do not have a firm grasp of their material. This will need to be preceded by a screening process, since only some VHVs need this training, and among those who do, it will not always be in the same intervention areas. One approach would be to test VHVs at a time when they have

come together for another purpose (e.g. for training in a new intervention) in order to identify the number of trainees and subjects needed.

Response: Through supervision, PFD staff identified VHVs who needed special attention. Refresher trainings were provided to all VHVs. At present, individual trainings are given to those with special needs during the refresher trainings and during supervision.

3. Periodic village censuses (every 1-2 years) should be conducted and VHV registers updated accordingly to ensure that the Program covers all eligible families.

Response: PFD and counterparts conduct a census every year in January. Information on new births, deaths and families moving to or leaving from the area are updated monthly.

4. The VHV register should be revised to contain only mother/caretakers name, child's name, pregnancies, births, deaths, immunization status and contacts in that year. The latter should consist of a simple tick mark made every time the VHV imparts health education to the mother, regardless of whether in a group or individually.

Response: VHV registers were revised as recommended. VHVs use a tick mark for every contact.

5. The VHV monthly report form should be revised to simply list activity by type (individual education, group education, referral) with tick marks, and VHVs trained to make a tick mark in the appropriate box and on the register "contact" column immediately after each activity.

Response: The VHV monthly report was revised exactly as recommended. VHVs now simply record activities conducted with a tick mark.

6. VHVs should be trained in additional interventions. These should be phased in one at a time, with 1-2 months in between new trainings to allow practical experience before going on to new material. Suggested new interventions, in order of priority, are: ARI, Pregnancy and Delivery, Dengue and Malaria, Dysentery and Typhoid, Skin Infections, IDD, and child safety.

Response: Due to the time-constraints of this grant and the responsibility to fulfill grant obligations, it is not possible for PFD to completely retrain VHVs in each of the new interventions listed above. PFD hopes to be able to address these important issues with the cost-extension grant which would start in October 2004.

In any case, for each of the interventions named, PFD's efforts to address these issues under the current grant are as follows:

- ARI – Initiation of IMCI at health centers in order to properly diagnose and treat ARI. Prevention by promotion of proper nutrition with the idea that well-nourished children are better able to fight common respiratory illness before they become acute. General promotion of health seeking behaviors and trust-building between community and the health system in order to promote early diagnosis and treatment. A new model on ARI will be developed if a grant extension is awarded.

- Pregnancy and delivery – As part of the Health Systems Strengthening project, PFD has hired two community midwives (with plans to hire a third) who provide on-the-job technical assistance to Health Center midwives in the areas of ANC, delivery, peri-natal care, birth spacing education, and outreach. The PFD midwives together with 10 Health Center midwives have received Life-Saving Skills (LSS) training and 10 HC midwives have received Pre-Life Saving Skills (ANC) trainings. PFD employed a midwife student intern (MPH candidate) to advise the maternal health project in the summer of 2003. This intern developed a Birth Preparedness proposal for which PFD is seeking funding for implementation in 2004. PFD has recruited an expatriate midwife volunteer to continue maternal health activities for at least the next year.
  - Dengue and Malaria – In 2002, PFD received a grant for a Dengue pilot operations research initiative based on a successful project from Vietnam, which is being conducted in the Chhlong OD, with a technical advisor based in Kratie. If successful, this project could expand to other villages. In 2003, PFD is starting a malaria education/bednet distribution project funded by the Global Fund. This project consists of bednet distribution and community education.
  - Dysentery and Typhoid – PFD’s current diarrhea intervention provides education and BCC towards prevention and treatment of dysentery and typhoid (e.g., hygiene promotion and ORS).
  - Skin Infections: Prevention of scabies has been emphasized in hygiene promotion as well as promoting health seeking behaviors when skin infections occur. This topic will be expanded if an extension grant is awarded.
  - Iodine Deficiency Disease: VHVs continue to promote the use of iodized salt, using flipcharts and leaflets. The topic is especially emphasized during Hearth activities.
  - Child Safety: Child Safety is addressed during the “caring” module of the NERP education sessions in Hearth villages. This module will be expanded to more villages if an extension grant is awarded.
7. VHVs who are interested should be assisted to become social marketing agents of health commodities in order to provide a small financial incentive with long term potential for sustainability while also increasing access to, and use of, desirable products. Since this will be labor intensive to establish and there is no way of knowing in advance which commodities will sell, this should be piloted first, a few commodities at a time, in a random sampling of villages (both riverine and inland). Commodities should be clearly linked to health education messages and VHVs reminded that the health education is to be provided to everyone in the catchment area, regardless of whether they wish to purchase commodities.

Response: PFD continues to investigate the issue of social marketing with VHVs. The marketing of health commodities may not be the best “answer” to motivating VHVs. The first concern is that if VHVs sell commodities, the profits might still not be enough to continue to motivate them and running a business requires even more work from them. PFD would also have to train VHVs on basic business practices such as budgeting and keeping track of inventory. Many people in the area sell small household items from their homes, without the help of PFD, as could VHVs. PFD would only be providing the capital and the connection to get the VHVs started. PFD will consult professional social marketing agents to discuss the feasibility of VHVs participating in such an endeavor. After

consultation with social marketing specialists, PFD may continue with this idea or find other ways of motivating VHVs, while working with existing entrepreneurs to stock health items.

*C. Health System Strengthening*

1. If other NGO assistance for the Referral Hospital does not materialize, PFD should seek the necessary funds and staff to provide this. At least one expatriate manager and two experienced local clinicians (one of them a secondary midwife) would be needed.

Response: URC is beginning work at strengthening the health system at the Referral Hospital level this year. PFD will work closely and collaborate with URC in the best way possible in order to ensure consistent provision of services.

2. Planned training of midwives in HCs should go forward, but serious consideration should also be given to inclusion of hospital midwives.

Response: In 2003, PFD trained 10 midwives in Life Saving Skills (LSS), 10 midwives in Pre-Life Saving Skills (ANC). Among the trainees for LSS was one midwife from the referral hospital. The other midwife from the referral hospital was previously trained by the Japanese Cooperation Agency (JCA).

3. PFD should explore alternatives to HC staff travel to villages for immunization by piloting means of subsidized transport to bring villagers to the HC on specific days of the month per village, using locally appropriate means of transport: ox-cart, motorcycle cart, boat etc. Provision of means of transportation to a villager selected by the community in exchange for providing this transportation on specified days (in lieu of payment) might be considered.

Response: This is likely to be a very complex, expensive and unsustainable intervention given realities in the field. Through PFD's Health System Strengthening project as well as the community education for health seeking behaviors, PFD has seen an increase in use of the public health system, rendering this recommendation less critical.

4. The present VSO nurse position is essential and should be retained. Consideration should be given to changing it to a salaried position in the interests of continuity since the incumbent will complete a three-year volunteer stint in April.

Response: The coordination of the Health Systems Strengthening project has transferred to a position held by a Khmer national, supervised by the ex-pat Provincial Coordinator. The VSO position has changed to a Maternal Health Advisory position, filled by a professional midwife.

5. PFD should continue to advocate with the PHD for allocation of additional staff to Damrei Pong HC and consider assisting in provision of relocation costs or housing if a potential transfer can be identified.

Response: PFD continues to advocate with the PHD and OD for more staff to Damrei Pong. The PHD responds that there are not enough resources to provide the complete MPA package to the HC. Damrei Pong receives special attention and assistance from PFD in provision of

technical assistance in clinical management and some resource support (such as fuel for transport).

6. PFD should work actively with the PHD and central MOH to ensure that the conditions in Snuol HC catchment area are addressed in the forthcoming revision of the Health Coverage Plan.

Response: The Snuol HC catchment is quite large and until recently outreach to remote villages was not conducted. PFD worked very closely with the PHD and OD officials to improve this situation. PFD HSS staff have assisted in instituting management systems and have helped staff with creative ideas for solving the outreach issue such as staying in the villages overnight to reduce time lost in travel. In 2003, EPI coverage has improved in this area.

7. PFD should pursue the possibility of a World Bank-funded equity fund for the hospital (planned in the next WB Project with locations not yet determined).

Response: As mentioned above, URC has been making plans to conduct health systems strengthening at the hospital. Although open to all collaboration possibilities, PFD will allow URC to take the lead on hospital equity fund activities.

#### *D. TBA Training*

1. TBA training should be undertaken as soon as possible in interventions that do not require availability of emergency obstetric care, with particular attention to immediate care of the newborn to establish a patent airway and prevent hypothermia, hypoglycemia.

Response: A Training Needs Assessment for TBAs is planned for October 2003. This assessment will be immediately followed by a training of trainers with the PHD.

2. If and when emergency obstetric care is available, specific referral and partnership mechanisms linking TBAs with the hospital should be developed, including arrangements which allow the TBA to maintain a (non-medical) role during the hospital delivery.

Response: PFD is developing a Birth Preparedness project which includes referral and partnership between TBAs, Community Midwives and the Referral Hospital. PFD will work closely with URC's Referral Hospital HSS project to develop these links at the appropriate time.

#### *E. Program Management*

1. Integration of the RH and VHV volunteer functions should be promoted through utilizing VHVs whenever new or replacement RH workers are needed and vice versa.

Response: In some cases, VHVs and CBDs (Community Based Distributors or RH volunteers) are the same, but this is usually the choice of the volunteer. The geographic areas and educational responsibilities, however, are diverse enough that full integration would be too burdensome to the volunteer, leading to reduced quality of work and increased drop-outs.

2. Program management should be integrated so that each PFD Program Officer monitors and supervises all activities in a geographical area: RH, VHV education, and malaria.

Response: PFD's CSPOs have become fully integrated in monitoring and supervision of the program. Each CSPO is responsible for supervision of VHVs and CBDs in a specific geographical location.

3. PFD national staff should receive training in supervisory techniques and management skills, preferably provided at the work site, and there should be a gradual devolution of management responsibilities to national staff over the remainder of the grant period, so that by the end of the current grant the expatriate functions in a primarily advisory capacity.

Response: PFD national staff are undergoing on-the-job training in program management, budget management, program development and staff supervision. In the follow-on grant, Cambodian Health Center staff members will be trained to take on full coordination of the Child Survival program.

#### *F. Monitoring and Evaluation*

1. Supervisors should be instructed to review all deaths in the past year with their VHVs and ensure they are recorded on the register, and continue to ask about deaths on a regular basis.

Response: During VHV/supervisor team meetings, VHVs report all deaths occurring in their area supplying a written report. The supervisor submits this report to the PFD HSS staff who enter the data into a database for further analysis and comparison with verbal autopsies.

2. Verbal autopsy for maternal and child deaths should be conducted annually after compilation of mortality statistics from VHVs. However, the current forms should be substantially revised to ascertain the exact age at death and include detailed questions appropriate to each age group (neonatal, post-neonatal and child). Immunization status should be included along with duration and severity of symptoms and temporal relationship of each symptom mentioned to death. Diarrhea should be described in terms of quantity, duration and type (watery, mucoid etc). Presence of chills with fever, cough, and any type of skin lesion should be specifically probed. Verbal autopsy forms should be completed by the same staff who will conduct the analysis and assignment of cause of death. These need to be experienced clinicians and expatriate TA will be required, either from the VSO nurse or a consultant.

Response: Verbal autopsies for child deaths are completed with mortality statistics from VHVs. Comprehensive forms, which include all of the details described in the recommendation, are included. A database is currently under construction. An expatriate midwife volunteer, who started in September, will undertake the analysis at the end of 2003.

3. In Hearth villages, growth monitoring should be continued after the end of NERPS throughout the grant period and careful records kept of anthropometrical data. In addition, mortality data should be maintained specific to those villages, based on VHV registers with a rapid house-to-house survey for verification. Baseline data should be constructed in the

same fashion using VHV registers from May 2001 – April 2002, verified by household survey.

Response: PFD plans to continue growth monitoring in all Hearth villages until the end of the grant period. Careful records are being kept of anthropometrical and mortality data for each village. Results from each village will be compared to baseline from VHV registers from 2001-2002.

4. Future household surveys should be done as a random sample stratified by HC catchment area with number of households in each proportional to the population but including sufficient households to be statistically representative at HC catchment level. This will produce a self-weighting estimate of indicators for the population as a whole plus “lot” specific estimates allowing comparison between supervision areas and identification of low performers.

Response: Since the MTE, all household surveys have been conducted using Lot Quality Assessment Survey (LQAS) methodology which uses HC catchment lots.

*G. Other:*

1. Community health education should be conducted using techniques such as drama or puppet shows on topics that require a broad community response to address, e.g. environmental sanitation issues. Entertainment should be followed by group discussion and analysis of the village situation, perhaps using videos or photographs of households and market areas, followed by an action plan to rectify identified problems.

Response: PFD developed and conducted a Drama/BCC workshop in September 2003. National staff have received complementary trainings in a variety of educational techniques which are currently being applied to VHV trainings (piloted in Hearth villages). Group discussions, using the Experiential Learning Cycle, follow each drama, puppet-show or storyboard.

2. The PFD Water and Sanitation Program should shift emphasis in Chhlong from water to sanitation, in order to reduce the incidence of dysentery and typhoid, which between them account for almost 10% of under 5 deaths.

Response: The PFD Water and Sanitation Program has concluded for the time being. PFD is currently seeking funding to renew Water and Sanitation projects.

3. The planned iron distribution pilot should (a) use an iron/folate preparation rather than iron alone, given the contribution of malaria to anemia in this population; (b) be limited to approaches with a realistic potential for scale up if successful; and (c) keep the design as simple as possible, preferably just one intervention which could be revised if needed based on experience rather than multiple approaches.

Response: Iron distribution has not yet begun. Community distribution will coincide with the planned Maternal Health project. Currently, PFD provides nutrition education for local food sources of iron and promotes ANC for pregnant women where they will receive iron/folate.



## VII. Success Stories

The PFD Child Survival project has encountered many anecdotes and qualitative evidence to continue to reflect impact and effectiveness. Some examples from the Hearth portion of the Child Survival Project are listed below:

1. Damrei Phong village: Chdech Sophat is a little girl who was born on 15 June 2001. Sophat lives with her mother, alone, as her father was murdered three years ago. Sophat's mother was malnourished while she was pregnant. One year after Sophat was born, her mother was having difficulty looking after her because of her poor economic situation. Her mother tried to give her to someone else, but nobody wanted her. Sophat was weaned after only 3 months and was fed mostly plain rice (no protein or vegetables). She developed both Marasmus and Kwashiorkor.

In January 2003, PFD began implementing Hearth in Sophat's village. Using a system of age-for-weight, she was diagnosed as malnourished. She also had a respiratory infection and diarrhea. Her body, face and hands were dirty. Sophat began to improve after just 6 days of NERP. She gained over 100 grams, but her mother refused to continue with the program because she thought the NERP food was giving her daughter diarrhea and worms. The VHV made special visits to this mother and provided intensive education about the process of rehabilitation and nutrition. The VHV taught the mother about the child's nutritional needs using flipcharts, posters and by highlighting positive deviant families. By September 2003, the mother had completely changed her behavior. She now provides high protein and high vitamin foods to Sophat. Sophat's physical condition has improved. She gains 200-300 grams per NERP. She is active, smiling and playing. Her face has color. The mother says that now she even washes Sophat with soap 2 or 3 times a day and the scabies are gone from her legs and head. The VHV and the mother have told PFD staff that Sophat's life was saved because of this intervention.

2. In the village of Tropeang Leark, near Snuol, a 2-year-old boy named Chheng Rath was very ill. After several weeks of high fever, Rath's mother took him to a local private practitioner. She did this because she could not make it as far as the health center due to bad roads flooded by the rains. Rath was diagnosed with three levels of falciparum malaria and severe malnourishment. His mother could not afford the intravenous and other drug treatments suggested by the private doctor, so she simply returned home. She was encouraged by VHVs to attend the NERP session. PFD staff noticed Rath's severe state immediately. He was so thin that his bones protruded from his skin. His eyes were sunken and he could not straighten his back. Fearing that Rath would not make it another day, PFD staff began intensive counseling of his mother. They helped her to make a plan to take the child to the health center as soon as possible. The mother finally brought Rath to the HC, and after malaria treatment and intensive feeding, he returned to the village, well enough to start attending PFD NERP sessions on a regular basis. One month later, Rath is sitting up, gaining weight and the hope of his survival has increased tremendously.
3. In the village of Prey Ko, PFD met with a severely malnourished 7-month-old girl named Chorn Reth. Reth had recently been adopted by a woman in the village who had never had any children. (Reth's biological mother died during childbirth). Reth had diarrhea quite often and her adopted mother did not know how to treat it at home or what complementary

foods to feed her. Having never had children, the mother had not participated in education sessions before. Everything the mother tried made the child's situation worse. Reth had severe kwashiorkor with swollen feet and face. The VHVs informed the mother about NERP and the mother started attending NERP feedings regularly (every 2 months for 10 days). VHVs provided education on how to treat diarrhea at home, how to prevent diarrhea, when to introduce complementary foods and what kinds of food will make the child healthy. After attending four sessions of NERP, Reth's diarrhea has ceased and her weight jumped from severely malnourished to normal.

Observations from PFD Staff:

1. CSPOs are finding that in the villages of Boss, Sre Triek and Dam Rai Phong, many women with *healthy*, well fed, children are participating in the NERP. The women state that they see the positive affects of the additional food and would like to benefit from the accompanying health education.
2. PFD staff have noticed that in the village of Tropieng Lak, malnourished children, who used to be quiet or cry during the NERP, are now healthy enough and have enough energy to laugh and sing songs.

## **VIII. Management System**

The Child Survival Program began with a flat organizational structure: one expatriate Program Coordinator assisted, initially, by six Cambodian Child Survival Program Officers. It subsequently increased to eight, plus the health systems strengthening staff. This has now become a more tiered system. The former Team Leader has now become the Team Manager and is being trained by the expatriate Program Coordinator in budgeting, program development, and supervision skills in order to be able to take over full management of the program in three years assuming a cost extension of the project is approved.

The UNFPA/MOH-funded RH Program has been integrated into the Child Survival program and the former team leader has become a provincial advisor.

The Program Coordinator is based fulltime in Chhlong. She is supervised and supported by a Phnom-Penh based expatriate Health Program Manager who spends 50% of her time back-stopping the Child Survival Program. She is also supported by a Finance/Administration Advisor. Above the Health Program Manager is the Country Program Director, who also helps support the Program, particularly on administrative issues and in dealings with external agencies. This staffing configuration provides technical and administrative oversight for the Program. Staff at headquarters in Silver Spring, MD, also backstop the project.

Financial management is coordinated between the Phnom Penh-based Finance/Administration Manager, the Chhlong-based Program Coordinator and the Chhlong-based Finance Officer. PFD uses sophisticated systems and technologies (such as *QuickBooks*) to track and account for financial issues.

The Chhlong office conducts weekly meetings among supervisors to discuss coordination, policy and logistics. Staff meetings are held monthly and consist of team-building exercises, program

updates, sharing of news and concerns, and introduction of new staff or changes in policies. Team-building events are scheduled quarterly or as needed.

PFD has made a number of investments in developing the capacity of its local personnel, who make up the majority of the staff and are the direct implementers. PFD National Staff received training this year on: Conducting Focus Groups; Hearth; Strategic Planning for Behavior Change; Sexuality and Reproductive Health; and BCC/Drama. In addition to formal training, the Program Coordinator provides on-the-job mentoring. Technical advising comes from various interns, short-term consultants and VSO volunteers.

PFD maintains a very positive relationship with the local government counterpart. Although no official assessment has been conducted on the part of the local MOH officials, all unofficial feedback from them has been encouraging.



## IX. Detailed Work Plan

Activity	Oct 03	Nov 03	Dec 03	Jan 04	Feb 04	Mar 04	Apr 04	May 04	Jun 04	Jul 04	Aug 04	Sep 04
<b>Health Education Activities</b> conducted by VHVs (approximately 1,600 formal presentations to community groups per month in 100+ villages)	X	X	X	X	X	X						
<b>Supervision</b> of 427 VHVs by Health Center and PHD Supervisors	X	X	X	X	X	X						
<b>Supervision and Mentoring</b> of 21 Health Center VHV supervisors by PFD staff	X	X	X	X	X	X						
<b>GMP:</b> Tropeang Lark, Prolay Triek, Kampong Sre, Meanchey, Krong	X											
<b>NERP:</b> Prek Kday, Beung Kiep, Tropeang Lark.	X											
<b>Drama Workshop for PFD Staff</b>	X											
<b><u>Vitamin A Campaign</u></b>		X										
<b>GMP:</b> Prey Ko, Tropeang Sre, Beung Kiep, Tropearng Lark, Prolay Triek, Prey Kday		X										
<b>NERP:</b> Kampong Sre, Meachey, Boss, Sre Triek, Prohout, Krong, Proma		X										
<b>New Hearth:</b> Proma		X										
<b>GMP:</b> Kampong Sre, Meachey, Boss, Sre Triek, Prohout, Krong, Proma			X									
<b>NERP:</b> Prey Ko, Tropeang Sre, Beung Kiep, Tropeang Lark, Prolay Triek, Dong, Prey Kday			X									
<b>New Hearth:</b> Dong			X									
<b>Collection</b> of VHV Yearly Registers			X									
<b>Drama Workshop for VHV Supervisors</b>			X									
<b>GMP:</b> Prey Ko, Tropeang Sre, Beung Kiep, Tropeang Lark, Prolay Triek, Dong				X								
<b>NERP:</b> Kampong Sre, Boss, Sre Triek, Prohout, Krong, Proma, Samrong, Sre Roneam				X								

Activity	Oct 03	Nov 03	Dec 03	Jan 04	Feb 04	Mar 04	Apr 04	May 04	Jun 04	Jul 04	Aug 04	Sep 04
<b>Special cases counseling</b> Hearth to VHVs				X	X							
<b>Census in villages</b>				X								
<b>GMP:</b> Kampong Sre, Boss, Sre Triek, Prohout, Krong, Proma,					X							
<b>NERP:</b> Meanchey, Beung Kiep, Prolay Triek, Tropeang Leark, Dong, Prey Kday					X							
<b>New Hearth:</b> Mill					X							
<b>Supervisor Refresher Training</b>					X							
<b>Drama Workshops for VHVs</b>					X	X						
<b>GMP:</b> Prey Ko, Meanchey, Tropearng Sre, Beung Kiep, Tropeang Leark, Prolay Triek, Mill, Dong, Prey Kday.						X						
<b>NERP:</b> Boss, Sre Triek, Krong, Proma						X						
<b>BCC TOT for PFD Staff</b> (assuming NCE)						X						
<b><i>If No Cost Extension (April-September, 2004) is approved, the following activities will take place. If it is not approved, closeout activities will occur during the period January-March, 2004.</i></b>												
<b>Health Education Activities</b> conducted by VHVs (approximately 1,600 formal presentations to community groups per month in 100+ villages)							X	X	X	X	X	X
<b>Supervision</b> of 427 VHVs by Health Center and PHD Supervisors							X	X	X	X	X	X
<b>Supervision and Mentoring</b> of 21 Health Center VHV supervisors by PFD staff							X	X	X	X	X	X
<b>GMP:</b> Kampong Sre, Boss, Sre Triek, Prohout, Krong, Proma							X					
<b>NERP:</b> Meanchey, Beung Kiep, Tropearng Leark, Prolay Triek, Mill, Dong, Prey Kday							X					
<b>GMP:</b> Prey Ko, Meanchey, Tropearng Leark, Beung Kiep, Tropearng Sre, Prolay Triek, Mill, Dong, Prey Kday								X				
<b>NERP:</b> Boss, Sre Triek, Krong, Proma, Sre Roneam								X				

Activity	Oct 03	Nov 03	Dec 03	Jan 04	Feb 04	Mar 04	Apr 04	May 04	Jun 04	Jul 04	Aug 04	Sep 04
<b>BCC Training for VHV Supervisors</b>								X	X			
<b>Meetings with Commune Councils</b> (discussions on exit strategy)								X				
<b>GMP:</b> Boss, Sre Triek, Krong, Prohout, Proma									X			
<b>NERP:</b> Meanchey, Beung Kiep, Tropearng Lark, Prolay Triek, Mill, Prey Kday									X			
<b>GMP:</b> Prey Ko, Meanchey, Tropeang Sre, Beung Kiep, Tropearng Lark, Prolay Triek, Mill, Dong, Prey Kday										X		
<b>NERP:</b> Boss, Sre Triek, Krong, Prohout, Proma										X		
<b>BCC Training for VHVs</b>									X	X		
<b>GMP:</b> Kampong Sre, Boss, Sre Triek, Prohout, Krong, Proma											X	
<b>NERP:</b> Meanchey, Beung Kiep, Tropearng Lark, Prolay Triek, Mill, Dong, Prey Kday											X	
<b>Handover Meeting with Commune Councils</b>											X	X
<b>Conduct Final Evaluation</b>											X	X
<b>Handover activities</b> with Health Centers and Community											X	X
<b>Final Report</b>												X